



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/745,229	12/20/2000	Agustin Salguero Cruz	32944-00036USPT	7532

27045 7590 05/11/2004

ERICSSON INC.
6300 LEGACY DRIVE
M/S EVR C11
PLANO, TX 75024

EXAMINER

VINCENT, DAVID ROBERT

ART UNIT	PAPER NUMBER
----------	--------------

2661

9

DATE MAILED: 05/11/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/745,229

Applicant(s)

CRUZ ET AL.

Examiner

David R Vincent

Art Unit

2661

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 26 April 2004.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 6-13 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 6-13 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date 4-5.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

Art Unit: 2661

In the present application, the applicant claims a method and apparatus for using VoIP between 2 or more mobile base stations (BS) or MSCs. To assist the applicant in any amendments which may be filed, the examiner would like to point out that sending voice calls from a PSTN/POTS (circuit switched network) to a packet switched network (hop-on), like the Internet, and back again (fall back or hop-off) has been done by phone companies since before 1995. Therefore, if one BS/MSC (serving a mobile device/phone) is in Virginia and another is in California, the phone companies will automatically try to send that voice data over the Internet/PS network. The fact that the calls are going from one BS to another as opposed to just between two landline/VoIP telephones makes no difference to the phone companies. Also when calls get sent over the PS network there is a method of detecting if the resources/GWs are available and if the QoS/delay parameters can be met. Once the delay through the Internet becomes too large, voice signals have to be sent back over the CS network.

Claim Rejections - 35 USC § 102

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

Art Unit: 2661

(a) the invention was known or used by others in this country, or patented or described in a printed publication in this or a foreign country, before the invention thereof by the applicant for a patent.

2. Claims 6-9 are rejected under 35 U.S.C. 102(a) as being anticipated by Valentine (WO 00/31951 of record).

Claims 6-13 are rejected under 35 U.S.C. 103(a) as being unpatentable over Valentine (WO 00/31951 of record).

Valentine (WO 00/31951 of record) discloses determining if handoff is needed (e.g., monitors quality of call and then makes decisions concerning handling of call and handover HO, pg. 5, line 20-pg. 6, line 14), using a main/anchor MSC (home or Anchor MSC, 12, Fig. 5; pg. 10, lines 1-5), using a second/target MSC (non-Anchor or roaming MSC, 14, Fig. 5; pg. 10, lines 1-5), allocating 1st VoIP Gateway (GW, pg. 10, line 20-pg. 11, line 1), allocating a 2nd GW (pg. 10, line 10-pg. 11, line 24), completing 2nd voice path (setting up VoIP/packet channel to second GW, pgs. 10-12), completing 1st voice path from SMSC to 1st GW (setting up call between 1st MSC to 1st GW, pg. 10, line 20-pg. 11, line 1; pg. 11, line 25-pg. 12, line 4), assigning channel to target MSC (setting up packet call using MAP messages, and VLRs, implies using signaling protocols which set up complete call, pgs. 10-12), sending unformatted (circuit switched/analog type voice data) to a first GW and having the 1st GW convert it into

Art Unit: 2661

formatted voice data (digital, packetized, or VoIP data), having receiving GW take the formatted voice data and convert it into unformatted data for the base station/MS (depacketization, pg. 9, lines 1-22), verifying path minimumization (attempting to set up call and reduce the use of more expensive CS connections, pg. 12, lines 6-18).

Regarding any and all the limitations that relate to minor parts of setting and completing a call, such as using phrases like allocating, completing, first path, second path, etc. It is clear that Valentine anticipates these limitations whether or not Valentine uses the same exact phrases for at least the following reason. Valentine clearly specifies setting up a call from a mobile to a GW through an IP network to a destination GW, MS, BS and mobile (e.g., Figs. 4-7 and respective disclosure) and using MAP messages (pg. 11). One of ordinary skill would realize that MAP messages are used in a signaling protocol, such as IS-41 and that call setup messages travel from the source to the destination (through all nodes all long the path) to see that the destination mobile is e.g., turned on and can be located by a BS, and that a channel can set up. In other words, it is inherent that during the setup messages are sent and received to allocate all nodes, GWs, links etc. because if a node, switch, or PSTN, is down/unavailable or if "all circuits

are busy" then the call cannot be placed. Also, during this setup process, an individual path/link is identified even when using VoIP and datagrams.

Claim Rejections - 35 USC § 103

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

2. Claims 10-13 rejected under 35 U.S.C. 103(a) as being unpatentable over Valentine (WO 00/31951 of record) as set forth above.

However, Valentine fails to particularly call for three MSCs as specified in claim 10.

It is obvious that since Valentine discloses roaming, and handoffs, that a mobile can move from an anchor MSC to a serving MSC and then to a target MSC. It merely amounts to roaming from the home area to a second and third area.


Any inquiry concerning this communication or earlier communications from the examiner should be directed to David R

Art Unit: 2661

Vincent whose telephone number is 703 305 4957. The examiner can normally be reached on M-TH.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Douglas Olms can be reached on 703 305 4703. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).


David R Vincent
Primary Examiner
Art Unit 2661

May 4, 2004